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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/12/2005

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EXAMINER

NGUYEN, HUNG D

ART UNIT

PAPER NUMBER

4118

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,157	Applicant(s) HESSE, JOHANN	
	Examiner HUNG NGUYEN	Art Unit 4118	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/12/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 10/27/08 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/12/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to the amendment filed on 10/12/2005. As directed by the amendment: claims 1-19 have been amended. Thus, claims 1-19 are presently pending in this application.

Claim Objections

2. Claim 1 is objected to because of the following informalities: “a tools”. Appropriate correction is required. It is suggested to amend to “a plurality of tools”.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 10 recites the limitation “said replaceable tools” in line 2. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 14 recites the limitation “each machine device” in line 2. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to —a machine device— or define a machine device earlier in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 7, 8, 11, 12, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Vokurka (EP 00731185 A1).

9. With regarding claim 1, Vokurka disclosed a welding automatic machine comprising a multiaxial transport mean (Figure 1): a carrier 1 (Figure 1) with a multiaxial machining 2 (Figure 1) unit with a plurality of tools 12 (Figure 1) arranged at a transport means.

10. With regarding claim 2, Vokurka disclosed the transport means (Figure 1) is designed as a multiaxial transport robot 2 (Figure 1).

11. With regarding claim 3, Vokurka disclosed the machine units (Figure 1) are designed as multiaxial small robots 2 (Figure 1) each with one said tools 12 (Figure 1).

12. With regarding claim 7, Vokurka disclosed the carrier 1 (Figure 1) is designed as a straight girder.

13. With regarding claim 8, Vokurka disclosed the small robots 2 (Figure 1) are design as six-axis articulated arm robots (along axis 3, 4, 5, 6, 7 and 8 as shown in Figure 1).

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14. With regarding claim 11, Vokurka disclosed the tools 12 (Figure 1) of the machine unit (Figure 1) are designed at least partly as said joining tools.

15. With regarding claim 12, Vokurka disclosed an additional support 9 (Figure 1) is provided for the carrier 1 (Figure 1).

16. With regarding claim 13, Vokurka disclosed a machine station (Figure 1) comprising:

- a multiaxial robot transport 2 (Figure 1);

- a carrier 1 (Figure 1) connected to said multiaxial robot transport 2 (Figure 1) for movement therewith;

- a plurality of multiaxial machining unit 2 (Figure 1) carries by said carrier 1 (Figure 1);

- a plurality of tools 12 (Figure 1) each of said multiaxial machining units (Figure 1) being connected to a respective one said tools.

17. With regarding claim 15, Vokurka disclosed a machine device (Figure 1) designed as a portal robot/portal robots (Figure 1 shows 2 portal robots).

18. Claims 1, 2 5-7 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Vokurka (US 4,323,758).

19. With regarding claim 1, Vokurka disclosed an automatic welding machine (robot machine) comprising a mutiaxial transport mean (Figure 1): a carrier 2 (Figure 1) with a multiaxial machining 4 (Figure 1) unit with a plurality of tools 5 (Figure 1) arranged at the transport means.

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20. With regarding claim 2, Vokurka disclosed transport means (Figure 1) is designed as a multiaxial transport robots 4 (Figure 1 and 3).

21. With regarding claim 5, Vokurka disclosed the machining unit 4 (Figure 1) can be control individually (Column 2, line 34 – 41).

22. With regarding claim 6, Vokurka disclosed the machine unit 4 (Figure 1) can be controlled from the transport mean (Column 3, lines 26-30).

23. With regarding claim 7, Vokurka disclosed the carrier 2 (Figure 1) is designed as an essential straight girder.

24. With regarding claim 11, Vokurka disclosed the tools 5 (Figure 1) of the machining units 4 (Figure 1) are designed at least partly as said joining tools.

25. Claims 1, 3, 10, 13, 14, and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Stoewer et al. (Pub. No.: US 2002/0007548 A1).

26. With regarding claim 1, Stoewer et al. disclosed an apparatus for riveting shell components comprising a multiaxial transport mean (Figure 2): a carrier 12 (Figure 2) with a multiaxial machining 3B (Figure 2) unit with a plurality of tools 15 (Figure 2) arranged at a transport means.

27. With regarding claim 3, Stoewer et al. disclosed the machine units (Figure 2) are designed as multiaxial small robots 14 (Figure 2) each with one said tools 15 (Figure 2).

28. With regarding claim 10, as best understood, Stoewer et al. disclosed the machine unit 14 (Figure 2) carry said replaceable tools 15 (Figure 2) (Column 8, line 16-19).

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29. With regarding claim 13, Stoewer et al. disclosed a machine station (Figure 2) comprising:

a multiaxial robot transport 14 (Figure 2);

a carrier 12 (Figure 2) connected to said multiaxial robot transport 14 (Figure 2) for movement therewith;

a plurality of multiaxial machining unit 3B (Figure 2) carries by said carrier 12 (Figure 2);

a plurality of tools 15 (Figure 2), each of said multiaxial machining units 14 (Figure 2) being connected to a respective one said tools.

30. With regarding claim 14, as best understood, Stoewer et al. disclosed the machine device 3B (Figure 4) is arranged at a station frame (Figure 4, the mounting frame on floor F).

31. With regarding claim 16, Stoewer et al. disclosed a method of machining cubic components 1 (Figure 4), by means of multiaxial transport means 9 (Figure 4), at least one tools 15 (Figure 2), and further comprising the step of : employing the transport means for introducing at least one carrier 12 (Figure 4) with one or more multiaxial machining units 14 (Figure 4) into the interior space of the component 1 (Figure 4), wherein the machining unit 14 (Figure 4) carry out machining operations on the side of the component 1 (Figure 2).

32. With regarding claim 17, Stoewer et al. disclosed the component is clamped on the inside by one or more said machining unit 9 (Figure 4) and is machined by said other machining units.

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33. With regarding claim 18, Stoewer et al. disclosed the carrier 12 (Figure 4) with the machining unit 14 (Figure 4) is introduced through an opening into the component 1 (Figure 4).

34. With regarding claim 19, Stoewer et al. disclosed the carrier 12 (Figure 4) with the machining units is additionally supported in the working position by a support mean 3A (Figure 4).

35. Claims 1, 2 4, 7, and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Tuenkers (DE 10017897).

36. With regarding claim 1, Tuenkers disclosed a framework systems for use in body construction in the motor industry comprising a multiaxial transport mean (Figure 1): a carrier 2 (Figure 1) with said a multiaxial machining 3 (Figure 1) unit with a tools 8, 5 and 4 (Figure 1) arranged at a transport means.

37. With regarding claim 2, Tuenkers disclosed transport means is designed as a multiaxial transport robots 3 (Figure 1).

38. With regarding claim 4, Tuenkers disclosed the machining units 3 (Figure 1) are arranged on different sides of the carrier 2 (Figure 1).

39. With regarding claim 7, Tuenkers disclosed the carrier 2 (Figure 1) is designed as an essential straight girder.

40. With regarding claim 9, Tuenkers disclosed the machine units 3 (Figure 1) are arranged on different side of the carrier 2 (Figure 1), offset in relation to one another.

41. With regarding claim 10, Tuenkers disclosed the machine units 3 (Figure 1) carry said replaceable tools 8, 5, and 4 (Figure 1).

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42. With regarding claim 11, Tuenkers disclosed the tools 8, 5, and 4 (Figure 1) of the machine units 3 (Figure 1) are designed at least partly as said joining tools.

Conclusion

43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yanagisawa (US Pat 4,606,488) disclosed a welding apparatus for a motorcar body having a first welding station and second station. Yanagisawa et al. (US Pat 4,719,328) disclosed a touch-up welding apparatus for motorcar body having a plural welding gun magazine holding differing welding gun are disposed along side of a welding station. Torii et al. (US Pat 5,132,887) disclosed a multi-articulation type robot for laser operation in a three-dimensional space. Hoos (US Pat 5,303,333) disclosed a method enables an axial movement, in particular in the form of a pendulum motion of a numerically controlled axis. Hays et al. (US Pat 5,974,643) disclosed programmable vision-guided robot turret-mounted tools and Roos (US Pat 6,615,112) disclosed a method and device for calibrating robot measuring station.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG NGUYEN whose telephone number is (571)270-7828. The examiner can normally be reached on Monday-Friday, 7:30AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quang Thanh can be reached on (571)272-4982. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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